





The APM Undergraduate Medical Education Special Interest Forum Conference:

Addressing New Challenges

Oral and Poster Abstract Presentations

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Programmed Oral Presentations

Oral No: 1

Creating a new undergraduate medicine palliative care module fit for tomorrow's doctors

Jean Potter, Sorayya Alam, Charles Daniels, Gurpreet Gupta, Jane Leithead, Lynne Marsh, Emilia Moretto, Lisa Nolan Brunel Medical School, Royal Berkshire NHS Trust, Northwest London University Hospital Trust, St Luke's Hospice, The Hillingdon Hospital NHS Trust, Duchess of Kent Sue Ryder Hospice, West Hertfordshire NHS Trust, Rennie Grove Peace Hospice

Introduction: Brunel Medical School (BMS), London, established in 2020, welcomed its first cohort in 2022 (n= 150: ~ 100 international students from >50 countries, ~ 50 UK students). The BMS model across phase 2 of the course is that each year students undertake several clinical block rotations in groups of 4-6. Each block starts with a campus teaching week (CTW) followed by five weeks of clinical placement.

Objective: To create de novo, (mapped to GMC Outcomes for Graduates and a combination of specific and generic Medical Licensing Assessment (MLA) requirements), the curriculum, CTW teaching, simulation training and clinical placements in Palliative Care, including appropriate end of module and MLA Style Applied Knowledge Test (AKT) assessments.

Methods: Using already established partner organisations for clinical placements, palliative care teams in these NHS trusts, and hospice organisations local to them, were invited to contribute to the combined Haematology, Oncology and Palliative Care Block (2week, 2 week and 1 week placements respectively). Palliative Care Module Leads in four sites were recruited, coordinated by a single BMS centred Specialty Lead, who was responsible for cross-site development and implementation of curriculum, teaching plans and assessments.

Results: Learning objectives were agreed amongst the leads and used as a basis for CTW content, learning resource creation and clinical placement and assessment requirements, subject to operationalisation at a local level to fit with ongoing service delivery responsibilities, whilst ensuring a parity of student experience / exposure across the cohort. Summative assessment, in the form of in-module assessment and termly AKT are co-created by the Leads, who also contribute to OSCE assessments and feedback on professionalism.

Conclusions: Clinical placements begin early Sept 2025. Roll out will be closely monitored through student feedback and ongoing development of BMS Undergraduate Palliative Care Community of Practice dedicated to developing knowledgeable, competent and caring future doctors.

Oral No: 2

Game based learning and gamification in undergraduate palliative medicine education- is it playful pedagogy or just fun and games?

Innes Peek, Sian Gallard, Fiona Rawlinson, Dylan Harris Cardiff University

Background: There is an increasing literature base around use of game based learning (i.e. use of games in their entirety to deliver educational content) and gamification (i.e. incorporating game based elements to non-game teaching formats) in healthcare education. But is palliative and end of life care too serious a subject matter to consider for 'serious games'? Is there any evidence of a role for this approach in undergraduate medical education? Do medical students find it an acceptable teaching format, and does it have any educational value?

Method: A systematic review was conducted to assimilate current published examples of gamification and game based learning in the palliative and end of life care education of healthcare professionals and healthcare students. Studies meeting the inclusion criteria where appraised using the MERSQI instrument, MMAT tool, and a CASP checklist. Reflexive thematic analysis was used to identify overarching themes from the included studies.

Results: Of 255 studies identified, nine met the inclusion criteria, of which four where specifically in undergraduate palliative medicine education. Those four explored the role of virtual reality, board games, card games and video game play in undergraduate palliative medicine education. A total of around 500 medical students were included in the four

studies, from Hong Kong, Thailand, the UK, and USA. The included studies used varying methods and outcomes and therefore were difficult to quantitively compare and combine. However, qualitative thematic analysis identified some common themes across the included studies.

Conclusion: Whilst not a panacea, there is some evidence that gamification and game based learning is an acceptable format for undergraduate palliative medicine teaching; can be used as an adjunct to other teaching; and, can be educationally effective whilst providing a safe learning environment.

Oral No: 3

Dying to escape – an educational, palliative care themed, escape room challenge for medical students

Georgia Housden

John Eastwood Hospice

Background: Your mission: You have 1 hour to find the jobs you need to complete before you can finish your shift – you will find your jobs by being curious and searching for what to do next. Can you escape? Game-based learning is used to create an immersive and engaging teaching session where students apply knowledge and skills for clinical decision making, without risk to patients. A package was designed with the aim of developing a game-based teaching session that would consolidate learning and increase medical student confidence in palliative care.

Method: A palliative care escape room challenge was created and delivered to fourth year medical students at John Eastwood Hospice. Students were surveyed before and after the session and used a Likert Scale to express their degree of agreement with statements related to their confidence and understanding in different areas of palliative care.

Results: The results were overwhelmingly positive, with a clear increase in confidence reported. The students remarked that they got to think like a 'real doctor', use their own initiative and work as a team — skills essential to a career in medicine and transferable to specialties outside of palliative care. A total of 37 students took part, of which 36 strongly agreed that they had found the session enjoyable and appropriate for their learning needs. On completion of the escape room, there was a 40% increase in the number of 'agree' or 'strongly agree' responses compared to the pre-session survey.

Conclusion: Game-based learning can be used effectively within the undergraduate curriculum to increase students' confidence in different areas of palliative care and prepare them for work in the clinical environment.

Oral No: 4

Assessing the utility of virtual reality in teaching medical students to break bad news

Samuel Rose, Yasmin Alagaratnam, Salwa Owasil

East Sussex Healthcare Trust

Background: While simulation is commonly used to teach medical students how to break bad news (1), it requires significantly more resources than traditional teaching methods (2). Given the resource constraints existing within medical education, we need to think of innovative ways to deliver teaching. This project explored the potential role of virtual reality (VR) in teaching students how to break bad news.

Method: Twenty-two medical students across East Sussex Healthcare Trust participated in a VR breaking bad news session. Each student completed a scenario where they had to explain to a patient's daughter that their father was dying. The software assessed them and provided individualised feedback. Qualitative feedback was subsequently collected from the students.

Results: All students had prior training in breaking bad news. Only four students had used VR in medical education, limited to anatomy tutorials. Importantly, all students reported learning from the session. Key takeaways included learning structured approaches for breaking bad news, as well as understanding the importance of avoiding euphemisms for death and addressing a patients' spiritual needs. Additional positive themes highlighted the value of the software's feedback, the immersive and realistic environment, and the perception of a safe space for making mistakes. Identified challenges included the software's limited capacity to interpret complex questions, difficulties in

conveying empathy, and robotic responses that disrupted conversational flow. Third-year students expressed greatest concern regarding the technology itself, whereas fifth-year students were more focused on refining their nuanced communication skills.

Conclusion: VR has great potential for use in palliative medical education. Particularly, for early-year students as a method to introduce models for breaking bad news and to teach key communications skills. Although current limitations prevent VR from fully replacing live actors, its machine learning capabilities suggest potential for continued refinement and enhanced effectiveness over time.

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Oral No: 5

Using virtual reality simulation to provide medical students with experiential exposure to caring for patients in the last days of life

Sarah Frearson, Alexandra Bucko, William Waldock, Karen Frame, Corey Briffa, Naomi Ehigie, Amir H. Sam, Risheka Walls

Imperial College School of Medicine, Digital Media Lab, PRP, Imperial College Healthcare NHS Trust

Background: Medical students can struggle to gain adequate exposure to patients at the end of their lives and often report feeling unprepared for practice. Virtual reality (VR) simulation with interactive questions can enable students to experience and 'manage' situations that can be hard to access on clinical placements, such as caring for patients in the last days of life.

Aim: To develop a VR simulation based on the management of a patient in the last days of life encompassing treatment escalation plans, anticipatory prescribing and symptom control.

Methods: VR simulation was utilised to provide students with exposure to a sub-acute emotionally charged scenario. The scenario was scripted in collaboration with clinical experts including a palliative care consultant alongside the digital development team. It was filmed using a 360o camera with added interactions via Unreal engine delivered through PICO headsets. Students received immediate feedback through breaking-the-fourth-wall scripting where actors talk directly to camera as well as written feedback to questions within headsets. Student feedback was requested at the end of each session.

Results: The VR simulation was rolled out to 350 final year medical students. Sessions were delivered to groups of up to 30 students and lasted 1 hour; 15 minutes introduction, 15 minutes VR experience and 30 minutes debrief. Feedback was gained from 85 students; 81% of students found the scenario realistic and 91% felt it met their learning needs. 88% of students felt more confident in managing end-of-life care and 89% gained confidence in opioid prescribing. Students commented on the positioning of the VR simulation in their course, suggesting earlier introduction.

Conclusion: VR simulation can be a useful adjunct for medical students in managing a dying patient. It is a scalable resource providing students with realistic immersion into clinical scenarios which they may not experience on placement.

Oral No: 6

Reimagining Palliative Care Education: Opportunities for Interprofessional Teaching

Lauryn Taylor

Keele University School of Medicine

Background: Providing comprehensive and high quality palliative care (PC) is fundamental, yet pre-registration PC training remains inconsistent within and across healthcare disciplines. The COVID-19 pandemic revealed that many

newly qualified health professionals felt underprepared to deliver effective end-of-life care. Given this, there is a need to explore more consistent and collaborative approaches to teaching PC.

Aims: To compare the content and teaching approaches used to deliver PC education across medicine, nursing, paramedic science and physician associate programmes at a single university. Furthermore, to explore programme leads' perspectives on interprofessional education (IPE) to identify opportunities for collaborative teaching.

Method: Published curriculum guidance for each programme was examined using qualitative inductive content analysis. Two researchers independently coded the data, with themes refined through consensus discussions to ensure reliability. Programme leads completed a questionnaire to provide contextual information on current curricular and teaching.

Results: Content analysis identified five core themes of PC education across all programmes expected learning outcomes: Communication, Complexity and Uncertainty, Clinical Education, Teamwork, and Patient Centred Care. Within these, theme subcategories included symptom management, recognising dying and legal responsibilities. Questionnaire responses showed three of the four programmes valued PC as an opportunity for IPE. Most programme leads supported the idea of a single PC lead to coordinate PC teaching across the different programmes. Despite shared learning objectives across programmes, such as communication and ethical issues, none currently deliver PC teaching in an IPE setting. Limited teaching time and staffing were repeatedly reported as current barriers to deliver high quality PC teaching.

Conclusions: Our preliminary findings demonstrate support and clear opportunities to re-imagine PC teaching as an interprofessional endeavour which could help overcome current barriers to its effective delivery. As this study was limited to a single institution, national input is needed to guide future IPE refocused curriculum development.

Posters

Poster No: 1

Learning to Care for the Dying: A Qualitative Study of Medical Students in the UK and Malaysia

Leoni Irvine-Hogg, Katie Turner

Newcastle University Medicine Malaysia

Background: The global demand for palliative care is projected to double by 2060 and will require doctors who are confident and competent in supporting patients at the end of life. Research demonstrates that medical students often feel underprepared for this role though this can be improved by educational opportunities. This study explores medical students' experiences of palliative care across the UK and Malaysia campuses of Newcastle University, highlighting opportunities to inform curriculum development.

Methods: Three focus groups were conducted with a total of 12 medical students. Data were analysed using Braun and Clarke's reflexive thematic analysis. Coding was developed collaboratively, and themes were generated inductively to capture both shared experiences and context-specific differences.

Results: Four overarching themes were identified: "Foundational knowledge of palliative care"; "Opportunities in the curriculum"; "Cultural, spiritual, and religious dimensions of care"; and "Emotional impact and student wellbeing". Students demonstrated confidence in managing core symptoms but expressed apprehension about more complex aspects of care. Both cohorts desired more structured, specialist-led teaching, with students at the Malaysia campus balancing conflict between formal and hidden curricula. Cultural, spiritual, and religious factors were recognised as central to care, with students differing in their areas of confidence according to context and students in Malaysia having increased exposure to these considerations. Encounters with dying patients were described as emotionally challenging across campuses, underscoring the need for formalised support to maintain student wellbeing.

Conclusions: Students expressed a clear desire for formally integrated palliative care teaching that addresses clinical competence, cultural considerations and supports student wellbeing. As students' experiences may vary depending on both background and university context, educators should remain reflexive, providing tailored support to meet diverse needs. By combining targeted curriculum content with appropriate support, medical schools can better prepare future doctors to provide compassionate, culturally sensitive, and emotionally informed end-of-life care.

Poster No: 2

Preparedness for Palliative Care: A Mixed Methods Study of Foundation Doctors' Training and Experiences at One University Hospital Site

Jessica Craig, Karam Karrar, Alba Saenz De Villaverde Cortabarria, Stephen Mason

University of Liverpool

Background: In England, 43.4% of deaths occur in hospitals (1). Palliative care (PC) is a core competency for Foundation Doctors (FDs), and medical schools are advised to include it in curricula. However, FDs' palliative care education and clinical experience vary; ensuring they feel prepared and supported is vital for delivering quality care and maintaining emotional well-being.

Methods: An explanatory sequential mixed methods design was employed. An online questionnaire was distributed to FDs at one NHS Trust (n=215). The questionnaire comprised the validated International Medical Education in Palliative Care (IMEP-e) questions and supplementary questions to investigate the quality and quantity of training, support available to FDs, and exposure to PC within foundation training. Focus groups were held to explore the views of FDs further, with data examined using thematic analysis to generate explanatory themes.

Results: The questionnaire was completed by 35 FDs (16.4% response rate). Median estimated hours of PC training were 24 (IQR 8.5-49) at the undergraduate level and 2 (IQR 0-4) and 2.5 (IQR 0-5) during FY1 training and FY2 training, respectively. During their first year of postgraduate work participants estimated the number of patients cared for in their last year, weeks and days of life were 25 (IQR 20-40), 27.5 (IQR 16-40) and 2.5 (IQR 10-20) respectively. FDs felt more supported during working hours (p=0.001). Subsequent focus groups (n= 8) provided in-depth qualitative insights. Five themes were identified: aligning medical education to support FD experience; identifying patients who require PC input; underpinning feelings of anxiety and uncertainty; barriers to practising PC; and emotional wellbeing and need for support.

Conclusion: Findings indicate that current PC training is inconsistent. A more structured PC curriculum at undergraduate and postgraduate levels is required to enhance FD preparedness, improve patient care, and safeguard doctors' well-being.

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Poster No: 3

Do Not Attempt Resuscitation (DNAR) Discussions- The experience of medical registrars in the Irish hospital setting

Laura Gaffney, Camilla Murtagh

University of Galway, Galway University Hospital

Introduction: Do not attempt resuscitation (DNAR) conversations are frequently encountered by junior doctors in the acute setting. They are challenged by these conversations, which often results in a delay in these conversations taking place or no discussion at all. While there is a recognised need for further training and support in this area, we lack a more in-depth knowledge of the personal issues that impede competent end of life discussions.

Methods: This is a qualitative study, using semi structured interviews and interpretative phenomenological analysis (IPA) to provide detailed accounts of the experience of medical registrars and specialist registrars in this context. All interviews were audio recorded and transcribed verbatim. Ethical approval was granted by the local teaching hospital. Results: Five semi structured interviews were carried out. The context in which DNAR discussions took place had a significant impact on its delivery as well as an emotional impact on the doctor. The wording we use is central to the impact of the conversation. This is something which they felt could be taught and developed through both explicit and implicit learning. Undergraduate communication skills workshops are not sufficient alone. Participants felt that patient and family expectations affected how and when the discussions took place, but ultimately doctors want to do what is morally right. The trajectory from novice to expert, while observing how senior colleagues navigate these conversations, had the most lasting effect in terms of learning.

Conclusion: Medical registrars are engaging in DNAR discussions frequently in their work. Repeated practice yields more confidence, but does not necessarily lessen physician emotion which can be triggered by any one of these conversations. Learning by observation of colleagues appears to form the basis from which medical registrars develop their own practice. Structured observation, feedback and reflection in both simulated and clinical settings, would help to enhance undergraduate and postgraduate training in this area going forward.

Poster No: 4

'Developing compassionate and competent doctors: an educator-turned clinician's perspective on embedding Palliative Care Principles in an undergraduate medical curriculum'

Sarah Nestor, Camilla Murtagh

Galway University Hospital, Galway Hospice Foundation

Urgent medical undergraduate curriculum change is needed if we are to provide for the anticipated tidal wave of palliative care demand. I Globally, up to 58% of deaths occur in acute hospitals. 2 Once graduated, junior doctors witness the sequelae of life-limiting illness, from mild symptom burden through to death yet many feel underprepared. 3 Moreover, the literature also suggests that some experience a significant sense of failure due to inadequate preparation in delivering palliative care. 4

'Strengthen undergraduate palliative care education' is the 15th recommendation of the latest rendition of the Irish Palliative Care National Policy **5** but there are many barriers to providing adequate education for our doctors in training including limited faculty expertise, time constraints and resource limitation in clinical staff.

The evidence for palliative care integration in improving patient-centred care outcomes is overwhelming **6** and teaching our junior doctors the value of interprofessional working models throughout their education will result in securing best patient-centred outcomes as well as reduced healthcare costs.

So how can we bridge the gap with curriculum developers in delivering palliative care education? Utilising existing networks and partnerships to deliver interactive, multidisciplinary case-based learning with reflective exercises ought to be considered. Additionally, the rising use of clinical simulation in both undergraduate and postgraduate models has proven useful and should be utilised in palliative care education. 7 In terms of education styles, large-group teaching settings often do not lend themselves to satisfactory experiential teaching and small-group focus groups and workshops often result in enhanced learning experiences. 8

In order to ensure our future clinicians deliver compassionate, comprehensive patient care, the core palliative care competencies of symptom management, communication, complex ethical decision-making, and multidisciplinary patient-centred care must be interwoven amongst existing streams of medical education.

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Poster No: 5

The A to F Assessment of Dying Patients - A stepwise approach to the assessment and management of dying patients

Michael Casey

University of Cambridge

Newly qualified foundation doctors will be involved in the care of a large number of patients needing palliative and end of life care (1).

The General Medical Council outlines that graduates should be able to care for dying patients with skill, compassion and clinical judgement (2).

However, low confidence in medical students and newly qualified doctors is regularly reported, with particular concern about offering dying patients effective symptom management, family support and psycho-spiritual support (3).

ABCDE approaches are an effective method of assessment in emergencies (4).

Following a case, witnessed by the author, with missed opportunities to identify and manage the agitation of a dying patient with severe urinary retention, an ABCDE style clinical assessment tool was developed to encourage doctors to examine dying patients and identify issues requiring management, using a system familiar to them. This tool guides doctors in assessing for common palliative care needs in the dying patient, in a step by step approach, and considering intervention, if required. The first iteration of the "Palliative A-E" assessment tool showed promising results in improving confidence in assessing and managing unconscious dying patients in a small cohort of foundation doctors (5).

This has since been further developed. The "A to F Assessment of Dying Patients" provides an additional stage, relating to the assessment of spiritual needs associated with the dying individual and the needs of their family. This A to F assessment tool is now being taught in a new end of life care simulation session for final year undergraduates at the University of Cambridge. We, the authors, would like to take this opportunity to introduce this assessment tool and discuss its development to this point. We invite input from the audience with the goal of further development and refinement through interviews or focus groups with Palliative Medicine professionals.

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